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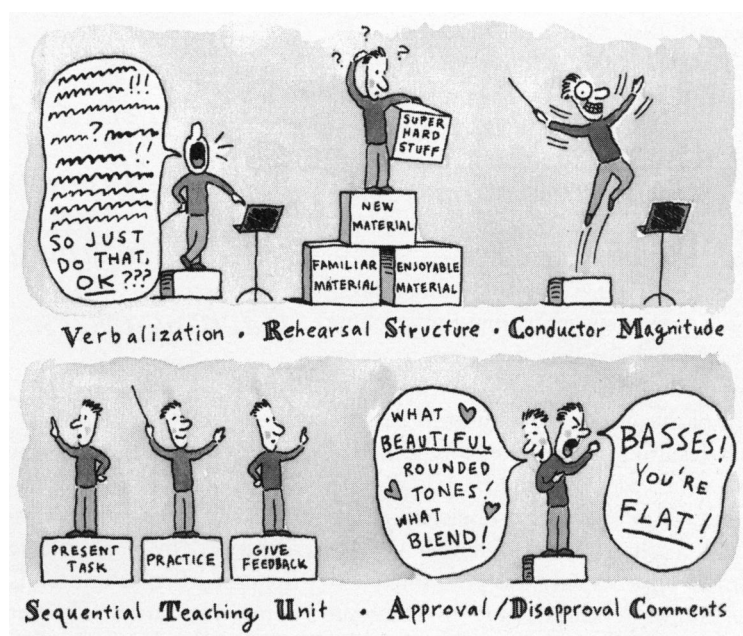
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# Education Research: Practical Implications for the Rehearsal

by Patrick K. Freer



Directors of choral ensembles may often see effective rehearsals as simply the byproduct of a conductor's personality or organizational skills rather than the result of detailed planning with specific academic and musical goals plotted for every second of rehearsal time. Recent research has begun to define which rehearsal structures, director behaviors, and academic presentations contribute to a conductor's success. The research studies mentioned in this article are a representative sampling of the reports which have appeared in major music education research journals during the past two decades.

## The Rehearsal Process

Since the topic of education reform once again became prominent during the early 1980s, educators have been held to new degrees of accountability when structuring classroom experiences. Such recently popular concepts as "Whole Language," "Brain-Based Learning,"<sup>1</sup> and the teaching models associated with Madeline Hunter<sup>2</sup> represent efforts to enhance classroom success. Although much of the research has focused on effective teaching in the academic classroom, some results also apply to the rehearsal hall.

### Sequential Teaching Units

In 1971, Becker, Englemann, and Thomas described a teacher/student interaction model which followed a three-part cyclical pattern consisting of a task presentation by the teacher,

student interaction with the task and teacher, and teacher feedback related to the task. Numerous studies in the fields of English and mathematics education verified the effectiveness of this approach before extensive research into applications for the performance classroom was initiated by Cornelia Yarbrough and Harry E. Price.<sup>3</sup> They, along with other researchers, have since published numerous studies on this sequential pattern of instruction in the music ensemble rehearsal.

The teaching unit is a three-step sequence beginning with the teacher's presentation of a task. As described by Price, this task presentation may take any of five forms: 1) academic musical task presentation (talking about musical or performance aspects, transmitting musical information, modeling); 2) directions (giving directions regarding who will sing or where to sing, preparing people to begin performing); 3) social task presentation (presenting rules of behavior, telling students how to act, or discussing necessary but nonmusical activities); 4) questioning (asking questions about performing the music, whether students know where to begin, or soliciting a response from the students); or 5) off-task statements (not related to rehearsal, or not included in the above categories).

The second part of the sequential process involves student interaction with the task. This student response can be either through performance, nonsinging verbal, or nonverbal responses. The third part of the student/teacher interaction model has received most research attention and concerns teacher feedback regarding the student response. This feedback may be either approving or disapproving, verbal or nonverbal, academic or social. It is important that the feedback be directly related to the task which was presented.

The cycle of interaction is usually considered complete only when all three steps have been successively presented. In a complete teaching cycle, the teacher tells the students what to

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do, lets them try it, and then tells them how well they did.

Two types of incomplete teaching units occur more frequently than others. One of these takes this form: students are presented with a musical or academic task, they respond, and the teacher stops them for incorrect performance of something other than the task initially presented. In the second type, a lengthy series of directions completely interrupts the teaching cycle. When auxiliary directions or information are inserted into the process, the flow of the class may be interrupted, possibly resulting in the choir forgetting the task which was presented.<sup>4</sup> This process of interaction may seem obvious to most music teachers, but research shows that choruses often spend less than thirty-five percent of rehearsal time in complete teaching cycles.<sup>5</sup>

By focusing attention on a task of the teacher's choice, the teacher is directing the learning of ensemble members. When a conductor waits until an ensemble is rehearsing to decide on the task, the chorus members have become the determiners of class content. Instead of reacting to students' incorrect behaviors, music teachers need to lead students to correct responses through a well-planned rehearsal presentation which includes appropriate feedback.

Research has shown that music teachers who employ this sequential pattern in their teaching are able to produce high performance quality while maintaining high student attentiveness and positive attitude.<sup>6</sup> This study also found that elementary students recalled more specific information when complete teaching patterns were used.

## Organization of the Rehearsal

Choral conducting textbooks disagree as to the most effective type of organizational structure for rehearsals. A study of rehearsal formats proposed by leading authors, however, found significant relationships between those formats and classroom effectiveness. James Cox identified three major types of rehearsal design and then conducted a survey of successful high school choral conductors, their students, and their administrators to identify strengths and weaknesses within each design.<sup>7</sup> Throughout the study, the re-

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*Choruses often spend less than thirty-five percent of rehearsal time in complete teaching cycles.*

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sponses of the students and their administrators were identical.

Rehearsal design A was defined as that described by Paul F. Roe in which the rehearsal begins and ends with familiar, enjoyable music.<sup>8</sup> The middle portion of the rehearsal contains slower-paced, detailed activities and the presentation of new material. Fifty-two percent of the surveyed conductors preferred this type of rehearsal design. Students of these conductors generally had positive attitudes toward both the conductor and the rehearsal process. Among the conductors included in the study, those favoring rehearsal design A were perceived by their students as being the most stimulating and enthusiastic about music. Other studies have shown that this design's middle portion of extended analytical work requires a dynamic conductor to stimulate interest while rehearsing tedious material.<sup>9</sup>

Clive B. Pascoe recommended that rehearsal format follow the ideals of the golden proportion (rehearsal design B).<sup>10</sup> This rehearsal design is similar to design A except that it is structured around a climax of intensity occurring approximately two-thirds of the way through the rehearsal. Twenty-two percent of the surveyed conductors preferred this design. These conductors were seen by their students as the most patient, perhaps resulting from the intricate planning necessary to achieve this climax in each rehearsal. Although the conductors were generally viewed favorably by their students, these same students received the lowest scores in the area of overall positive attitude.

Lloyd Pfausch proposed a third design in which music is alternated according to familiarity and difficulty.<sup>11</sup> This structure,

rehearsal design C, results in frequent changes of pace within the rehearsal. Twenty-five percent of the directors in this study preferred this rehearsal design. Like students in group A, these students rated their directors and overall experiences more positively than did students in group B.

The results of this study highlighted several items which are immediately useful to the practicing choral conductor:

1. Although the majority of surveyed conductors preferred rehearsal design A, it is perhaps more significant that each conductor believed in structuring a rehearsal at all. This implies that successful conductors need to be aware of their own teaching styles and structures instead of falling into the pattern of, "let's sing it through and see what happens." This result corresponds with those of the investigations into complete sequential teaching units discussed earlier in this section.
2. Each director stated the necessity of including a run-through of a musical composition before moving on to the next area of study in a rehearsal. This is similar to the concept of "closure" espoused by the Instructional Theory Into Practice (ITIP) program, the instructional framework associated with teacher-educators Ernest Stachowski and Madeline Hunter.<sup>12</sup>
3. Students were asked many questions about their directors and rehearsal structure but found it difficult to respond to some of the categories, perhaps because of unfamiliarity with concepts such as personality types and rehearsal organization. However, students were better able to rate their directors on the basis of enthusiasm or apathy toward music and teaching, regardless of which rehearsal structure was used.
4. Although the study did not find any appreciable differences in musical performance outcomes relative to the various rehearsal structures, significant differences were noted in students' emotional impressions of the conductor and the rehearsal process. It may be that the essential factors in success are the conductor's personality and organizational abilities, regardless of the rehearsal format used.

# Effects of Conductor Behavior

Choral music educators routinely have class sizes which vastly exceed those found in other types of classrooms. Assuring that each student is on-task for the entire rehearsal requires that conductors be aware of those procedures which generate focused learning. Several studies have been conducted to determine the effects of teacher behaviors in the areas of classroom/rehearsal environment, student attitudes toward choral music, and student on-task behaviors.

## Verbalization Time

Many different types of events occur in a choral rehearsal: modeling, logistical instructions, academic task presentations, reinforcement, student responses, and evaluation. All of these events consume precious seconds of the rehearsal, yet most of these do not require singing. Various studies have indicated that choral conductors typically spend between 35 percent and 50 percent of total rehearsal time engaged in nonsinging verbalizations.<sup>13</sup> There is some disagreement as to whether the amount of an individual's teaching experience produces any appreciable difference in the amount of teacher verbalization time.<sup>14</sup> It is certain, however, that excessive teacher verbalization causes a decrease in student attentiveness. A study of secondary instrumental conductors confirmed that necessary but routine non-musical verbalizations usually have a negative effect on student attitudes. On the other hand, when conductors address challenging expressive and pedagogical elements within the rehearsal, verbalizations help to foster positive student attitude.<sup>15</sup>

## Classroom Environment

Donald Hamann was instrumental in developing a study to correlate classroom environments with contest ratings among successful high school performing ensembles.<sup>16</sup> Using the Classroom Environment Scale, Form R (CESR), Hamann found significant differences in classroom scores relative to contest ratings, teacher/student status, and gender.

The CESR is a widely used tool for evaluation of classroom environment.

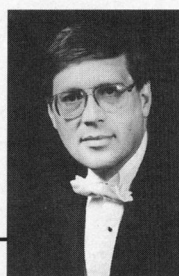
Ninety true/false items provide a balanced evaluation of nine areas: student involvement, affiliation (student friendships), teacher support, task orientation (the emphasis placed on accomplishing planned activities), student in-class competitiveness, order and organization of assignments and activities, clarity and consistency of rules, active teacher control over the environment (especially discipline), and innovation (teacher/student creativity).

The results of Hamann's study clearly indicate that students need to feel a part of the learning process rather than functioning as passive recipients of teacher knowledge. Ensembles which achieved high contest ratings had significantly higher CESR scores in the areas of teacher support, order and organization, involvement, and affiliation. Ensembles which were awarded lower contest ratings scored significantly higher CESR scores in task orientation. Like nonmusic classrooms,

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rehearsal halls appear to be most successful when there are many opportunities for student input, maximum levels of teacher support, and a variety of well-structured lessons and activities. Classroom environments are less successful when the teacher provides a task-oriented atmosphere.

Hamann reports that female students in several studies felt significantly more teacher support than did males. Until further research offers specific suggestions, choral conductors should attempt to examine and adjust their classroom environments to lessen this perception among male students.

### Conductor Magnitude

Several studies have sought to identify those conductor characteristics which contribute to positive student attitudes and behaviors. One of these was a study to determine the effect of conductor physical activity (magnitude) on student behavior in choral ensembles.<sup>17</sup> Four high school and university choruses were

rehearsed by three conductors: their usual conductor, a high magnitude conductor, and a low magnitude conductor. High magnitude conductors were characterized as those employing a wide array of behaviors in the following areas: eye contact, closeness (proximity), gestures, facial expressions, rehearsal pace, and vocal volume and modulation. Low magnitude conductors were identified as those who lacked a variety of behaviors in the same categories.

The results of this study indicated that the magnitude of conductor behavior had no significant effect on the musical performance or attentiveness of students in choruses; however, there was a significant increase in overall positive attitude of students toward the high magnitude conductor.

The finding that all the choirs studied received similar ratings for student attentiveness is supported by research indicating that, in the case of performance groups, the music, rather than the teacher, serves as the source of reinforcement.<sup>18</sup>

Off-task behaviors did occur somewhat less frequently in this study when students were rehearsed by the high magnitude conductor. An interesting finding for any teachers who have wished for "eyes in the back of their heads"—eye contact produces more immediate on-task behavior than any other single conductor behavior. Conversely, a lack of teacher eye contact results in the highest level of off-task student behaviors.<sup>19</sup>

Although the difference in performance ratings was minimal, the lowest ratings for three of the four participating ensembles were achieved under the low magnitude conductor. This study indicates that successful conductors need to develop a varied physical repertoire of rehearsal behaviors which can be applied interchangeably and with ease to achieve maximum student interest.

### Conductor Approval/Disapproval Comments

Perhaps no single aspect of teacher behavior influences student attitude more than the ratio of teacher approval comments to teacher disapproval comments. An observation reported by Kenneth Murray showed that only 7.4 percent of all comments made by high school conductors he observed during a one-week period were positive. It was also found that a ratio of fifty percent approvals to fifty percent disapprovals was more effective than one hundred percent approvals or one hundred percent disapproval responses.<sup>20</sup>

Murray's study revealed that students rated the music and rehearsal most favorably when eighty percent of the conductor comments were approvals. This study also identified the results of conductor reinforcement comments on performance quality. The highest performance scores followed experiences with eighty percent approval responses, regardless of the difficulty of the music. Conversely, the lowest performance scores were achieved using the easiest music with only twenty percent approvals.<sup>21</sup> Price also found, predictably, that a conductor reinforcement ratio of eighty percent approvals and twenty percent disapprovals resulted in significantly greater gains in performance level and student attitude ratings than did a strategy employing no feedback at all.<sup>22</sup>

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## Relationships Between Magnitude, Attitude, and On-Task Behaviors

The Syracuse University Symphonic Band participated in a study formulated to consider the impact of much of the research presented in this article.<sup>23</sup> The band was rehearsed under a variety of conditions to measure the combined effects of conductor verbalizations, conductor magnitude, sequential teaching units, approval/disapproval comments, and, to a lesser degree, rehearsal design.

The results of the study showed the correlation among all of the teacher behaviors presented. It was clear that the most consistently efficient rehearsals occurred when recent research recommendations were implemented, resulting in the highest musical performance gains and the highest student attitude ratings. Simply stated, active student participation, complete teaching units, and a high conductor magnitude result in higher performance gains and lower incidence of off-task behaviors.

## Conclusion

A review of the research into use of rehearsal time suggests that choral educators must first determine their preferred rehearsal design and how that design will be implemented in the classroom environment. Regardless of rehearsal structure, conductors need to become aware of the impact of conductor magnitude and verbalization on student attitude and attentiveness. The conductor needs to utilize complete teaching units which present, practice, and reinforce student skills or knowledge. An implementation of these elements into the choral rehearsal is essential to developing an ensemble which is enthusiastic and focused on the literature at hand.

Granted, all of this may seem impractical for the public school music teacher who spends half of the day wheeling a cart and a keyboard from classroom to classroom, or for the college instructor with courses in theory, voice, history, and general music methods. Why spend the

time trying to interpret the "number-crunching" contained in these studies? The investment of time and energy necessary to implement these findings will enable ensemble conductors at any level to develop and realize more consistently successful rehearsals and to become better teachers.

## NOTES

<sup>1</sup>Renate Nummela Caine and Geoffrey Caine, "Understanding a Brain-Based Approach to Learning and Teaching," *Educational Leadership* 48 (October 1990): 66-70.

<sup>2</sup>T. Clark Saunders and Joanne L. Worthington, "Teacher Effectiveness in the Performance Classroom," *Update: Applications of Research in Music Education* 8 (Spring/Summer 1990): 26-27.

<sup>3</sup>W. C. Becker, S. Englemann, and D. R. Thomas, *Teaching: A Course in Applied Psychology* (Chicago: Science Research Associates, 1971), 306-315, quoted in Cornelia Yarbrough and Harry E. Price, "Sequential Patterns of Instruction in Music," *Journal of Research in Music Education* 37 (Fall 1989): 179-80.

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<sup>4</sup>Harry E. Price, "An Effective Way to Teach and Rehearse: Research Supports Using Sequential Patterns," *Update* 8 (Fall/Winter 1989): 42-43.

<sup>5</sup>Yarbrough and Price, "Sequential Patterns of Instruction," 184.

<sup>6</sup>Harry E. Price, "The Effect of Conductor Academic Task Presentation, Conductor Reinforcement, and Ensemble Practice on Performers' Musical Achievement, Attentiveness, and Attitude," *JRME* 31 (Winter 1983): 253.

<sup>7</sup>James Cox, "Rehearsal Organizational Structures Used by Successful High School Choral Directors," *JRME* 37 (Fall 1989): 201-18.

<sup>8</sup>Paul F. Roe, *Choral Music Education*, 2d ed. (Englewood Cliffs, NJ: Prentice Hall, 1983), 248.

<sup>9</sup>Cornelia Yarbrough, "Effect of Magnitude of Conductor Behavior on Students in Selected Mixed Choruses," *JRME* 23 (Summer 1975): 144; and Pamela Dayle Hopton Fiocca, "A Descriptive Analysis of the Rehearsal Behaviors of Exemplary Junior High and Middle School Choir Directors," *Contributions to Music Education* no. 16 (1989): 28.

<sup>10</sup>Clive Brownley Pascoe, "Golden Proportion in Musical Design," *Dissertation Abstracts International* 34 (December 1973): 3456-A.

<sup>11</sup>Lloyd Pfautsch, "The Choral Conductor and the Rehearsal," in *Choral Conducting Symposium*, ed. Harold A. Decker and Julius Herford, 2d ed. (Englewood Cliffs, NJ: Prentice Hall, 1988), 81-82.

<sup>12</sup>Sybil G. Nadel, compiler, in consultation with Ernest Stachowski, *Manual of the Academy for the Advancement of Teaching and Management* (Edison, NJ: New Jersey State Department of Education, 1986), 14; and J. Ronald Gentile, *Instructional Improvement: Summary and Analysis of Madeline Hunter's Essential Elements of Instruction & Supervision* (Oxford, OH: National Staff Development Council, 1988), 44-45.

<sup>13</sup>William McCord Caldwell, Jr., "A Time Analysis of Selected Musical Elements and Leadership Behaviors of Successful High School Choral Conductors," *Dissertation Abstracts International* 41 (September 1980): 976A; and Yarbrough and Price, "Sequential Patterns of Instruction," 184.

<sup>14</sup>Richard Eugene Watkins, "A Descriptive Study of High School Choral Directors' Use of Modeling, Metaphorical Language, and Musical/Technical Language Related to Student Attentiveness," *Dissertation Abstracts International* 47 (November 1986): 1644-A; and Michael J. Wagner and Eileen P. Strul, "Comparisons of Beginning Versus Experienced Elementary Music Educators in the Use of Teaching Time," *JRME* 27 (Summer 1979): 120.

<sup>15</sup>Louis A. Menchaca, "A Descriptive Analysis of Secondary Instrumental Conductor Rehearsal Problem-Solving Approaches, Addressed Musical Elements and Relationship to Student Attitude," *Dissertation Abstracts International* 49 (March 1989): 2575-A.

<sup>16</sup>Donald L. Hamann, Charlotte Mills, John Bell, Elza Daugherty, Robin Koozer "Classroom Environment as Related to Contest Ratings Among High School Performing Ensembles," *JRME* 38 (Fall 1990): 215-224.

<sup>17</sup>Yarbrough, "Effect of Magnitude of Conductor Behavior," 134-46.

<sup>18</sup>Kenneth Carl Murray, "The Effect of Teacher Approval/Disapproval on Musical Performance, Attentiveness, and Attitude of High School Choruses," in *Research in Music Behavior: Modifying Music Behavior in the Classroom*, ed. Clifford K. Madsen, R. Douglas Greer, and Charles H. Madsen, Jr. (New York: Teachers College Press, 1975), 178.

<sup>19</sup>Cornelia Yarbrough and Harry E. Price, "Prediction of Performer Attentiveness Based on Rehearsal Activity and Teacher Behavior," *JRME* 29 (Fall 1981): 216.

<sup>20</sup>Murray, "Teacher Approval/Disapproval," 166.

<sup>21</sup>*Ibid.*, 177-78.

<sup>22</sup>Price, "Conductor Academic Task Presentation," 253.

<sup>23</sup>*Ibid.*, 245-57.

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